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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/876,793	06/07/2001	Kang Soo Seo	46500-000610/US	9026
30593                      7590                      12/02/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
SHELEHEDA, JAMES R				
ART UNIT		PAPER NUMBER		
2424				
MAIL DATE		DELIVERY MODE		
12/02/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/876,793

**Applicant(s)**

SEO ET AL.

**Examiner**

JAMES SHELEHEDA

**Art Unit**

2424

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20, 22, 25-27 and 30-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20, 22, 25-27 and 30-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/14/08 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 20, 22, 25-27 and 30-50 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 20, 25-27, 30-33, 35-37, 39-41, 43-45 and 47-49 rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (Takahashi) (6,483,983) (of record) in view of Taira et al. (Taira) (6,009,234) (provided by applicant).

As to Claim 20, while Takahashi discloses a computer readable medium having a data structure for managing reproduction of menu data, comprising:

a video data storing area storing one or more playback units of video data (disk area dedicated to storing recorded video; column 9, lines 18-31 and lines 52-61);

a menu data storing area storing menu data comprising one or more thumbnail pictures corresponding to each playback units (thumbnails also recorded on the disk; column 12, lines 7-62), each thumbnail stored as a block of menu data on the computer readable medium (picture array menu; column 2, lines 32-54 and column 9, lines 8-51 and column 12, lines 32-56); and

a menu management area storing menu management information, the menu management information providing an index to menu data (column 9, lines 8-51 and column 12, lines 20-23 and 49-56),

wherein the thumbnail pictures in the menu data are reproduced based on the menu management information (column 5, line 21-column 7, line 7), he fails to specifically disclose menu data files including a group of thumbnail pictures, the group of thumbnail pictures stored together as a block of menu data.

In an analogous art, Taira discloses a computer readable medium having a data structure for managing reproduction of menu data (Fig. 4 and 5; column 8, lines 25-44 and column 11, lines 38-61) including menu data files including a group of thumbnail pictures (Fig. 5; column 11, lines 38-column 12, line 26), the group of thumbnail pictures stored together as a block of menu data (Fig. 5; column 11, lines 38-column 12, line 26) for the typical benefit of taking advantage of a known method of recording menu data,

which would provide a more efficient storage/retrieval method by grouping the data together compared to a system in which the menu data was stored in plural disparate positions.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Takahashi's system to include menu data files including a group of thumbnail pictures, the group of thumbnail pictures stored together as a block of menu data, as taught in combination with Taira, for the typical benefit of taking advantage of a known method of recording menu data, which would provide a more efficient storage/retrieval method by grouping the data together compared to a system in which the menu data was stored in plural disparate positions.

Claims 30-33 correspond to Claim 20. Thus, each is analyzed and rejected as previously discussed. (**Note:** the "optical pickup" and "controller" components to read/write data of claims 31 and 33 are disclosed at column 3, line 63-column 4, line 33, column 7, lines 50-57 and column 9, lines 22-31).

As to claims 25, 35, 39, 43 and 47, Takahashi and Taira disclose wherein the controller is configured to control recording the menu management information (recording the menu data on the disk; column 5, line 21-column 7, line 16, column 9, lines 36-51 and column 12, lines 7-57), the menu management information indicating a number of reduced pictures stored in the menu data area (wherein each movie has a

defined and numbered listing of pictures associated with it; see Fig. 3; column 5, line 21-column 7, line 16, column 9, lines 36-51 and column 12, lines 7-57).

As to claims 26, 36, 40, 44 and 48, Takahashi and Taira further teach the use of "head indexing," a well-known technique in video reproduction. Head indexing is a process by which addresses are attached to various frames in a data stream, thereby providing quick access to desired frames (i.e., the reduced pictures) in the picture array. (Col. 1, Ln. 27-44). Takahashi and Taira disclose wherein the controller is configured to control recording the menu management information (recording the menu data on the disk; column 5, line 21-column 7, line 16, column 9, lines 36-51 and column 12, lines 7-57) which provides a starting address of a frame displayed in the array, this address would, in essence, be a starting and ending address since a "frame" is a defined point (i.e., beginning and end) in the data stream. Following this logic, it would be inherent that the addresses (i.e., frames) indicate the number of frames stored on the DVD. Accordingly, Takahashi anticipates each and every limitation of Claim 26.

As to claims 27, 37, 41, 45 and 49, since each frame (i.e., thumbnail) in the array has a corresponding address identifier, it is inherent the array include said starting addresses. Accordingly, Takahashi and Taira disclose each and every limitation of Claim 27.

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5. Claims 22, 34, 38, 42, 46 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi and Taira and further in view of Chen et al. (Chen) (5,917,830) (of record).

As to claims 22, 34, 38, 42, 46 and 50, as indicated above, Takahashi and Taira disclose each and every claim limitation except wherein the menu data area records padding data between at least two of the blocks of menu data. However, within the same field of endeavor, Chen discloses a similar system wherein null packets are inserted (i.e., appended) into the video stream for the purpose of preventing buffer overload. (Abstract; Col. 2, Ln. 40-54). The exact placement of such null packets is obvious and a matter of simple design choice. Accordingly, it would have been obvious to one of ordinary skill in this art at the time of Applicant's invention to combine the systems of Takahashi and Taira with Chen in order to prevent RAM buffer overload through utilizing null data packets appended to each menu picture data.

### ***Conclusion***

6. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

### **Certificate of Mailing**

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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

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Typed or printed name of person signing this certificate:

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES SHELEHEDA whose telephone number is (571)272-7357. The examiner can normally be reached on Monday - Friday, 9:00AM - 5:30PM.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James Sheleheda/  
Examiner, Art Unit 2424

JS